CE STICK (SMAW) ELECTRODE

Fleetweld® 37

Mild Steel, Rutile • AWS E6013

Key Features

- Operable with low amperages on sheet metal
- Excellent bead appearance
- Slag control accommodates vertical down welding

Typical Applications

- Sheet metal
- Irregular short welds that change positions
- Maintenance or repair welding
- For use with small AC welders with low OCV

Conformances

AWS A5.1/A5.1M: 2004	E6013
ASME SFA-A5.1:	E6013
ABS:	E6013
Lloyd's Register:	3M
DNV Grade:	1
GL:	1
BV Grade:	1
CWB/CSA W48-06:	E4313
EN ISO 2560-B:	E4313 A

Welding Positions

All

DIAMETERS / PACKAGING

Diameter in (mm)	Length in (mm)	1 lb (0.5 kg) Plastic Tube 6 lb (2.7 kg) Master Carton	5 lb (2.3 kg) Plastic Tube 20 lb (9.1 kg) Master Carton	50 lb (22.7 kg) Carton
5/64 (2.0)	12 (300)			ED010170
3/32 (2.4)	12 (300)	ED031726	ED032450	ED010161
1/8 (3.2)	14 (350)	ED031727	ED032451	ED010153
5/32 (4.0)	14 (350)			ED010165
3/16 (4.8)	14 (350)			ED010156

MECHANICAL PROPERTIES[1] – *As Required per AWS A5.1/A5.1M: 2004*

	Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft•lbf) @-29°C (-20°F)
Requirements - AWS E6013	330 (48) min.	430 (60) min.	17 min.	Not Specified
Typical Results[3] - As-Welded	400-440 (58-64)	460-515 (67-75)	20-31	37-76 (27-56)

DEPOSIT COMPOSITION[1] – *As Required per AWS A5.1/A5.1M: 2004*

	%C	%Mn	%Si	%P	%S
Requirements - AWS E6013	0.20 max.	1.20 max.	1.00 max.	Not Specified	Not Specified
Typical Results[3] - As-Welded	0.04-0.07	0.32-0.45	0.16-0.24	0.01-0.02	0.01-0.02

	%Ni	%Cr	%Mo	%V
Requirements - AWS E6013	0.30 max.	0.20 max.	0.30 max.	0.08 max.
Typical Results[3] - As-Welded	≤ 0.07	0.02 - 0.04	≤ 0.02	0.01-0.02

TYPICAL OPERATING PROCEDURES

	Current (Amps)				
Polarity[4]	5/64 in (2.0 mm)	3/32 in (2.4 mm)	1/8 in (3.2 mm)	5/32 in (4.0 mm)	3/16 in (4.8 mm)
AC	50-80	75-105	110-140	160-200	205-260
DC±	45-75	70-95	100-135	145-180	190-235

[1]Typical all weld metal. [2]Measured with 0.2% offset. [3]See test results disclaimer below. [4]Preferred polarity is listed first.

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at www.lincolnelectric.com

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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